

[54] PROCESS FOR THE PREPARATION OF
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[57] ABSTRACT

The organ transplants are intended to be used as a replacement (prostheses) for organs or parts of organs, for examples arteries or veins, which have undergone pathological change or are functionally impaired. The organs, which are taken from a fish, bird or higher mammal, are subjected to crosslinking of the amino groups and of the alcoholic hydroxyl groups of the peptide chains of the intercellular matrix by means of a di-, tri- or poly-carboxylic acid. It is advantageous subsequently to treat the crosslinked product with a dialdehyde, in order to bind amino groups which have not reacted, or to free the crosslinked product from material which potentially may act as an antigen, by hydrolysis with ficin, papain or a protease having a smaller action. After the hydrolysis, a comprehensive crosslinking is appropriately ensured using a dialdehyde or a di-, tri- or poly-carboxylic acid. The resulting prostheses are distinguished by chemical stability, biophysical and biochemical properties similar to those of the natural material and the absence of rejection reactions.

12 Claims, No Drawings